## memorandum

DATE: March 9, 2004

REPLY TO ATTN OF: SC-20

SUBJECT: Request to Conduct a CD-1 Review of the BTeV Project.

TO: Mr. Daniel Lehman, Director, Construction Management Support Division, SC-81

I would like to request that you conduct a CD-1 Review for the B Physics at the Tevatron (BTeV) Project on April 27-29, 2004 at Fermi National Accelerator Laboratory. The purpose of this review is to validate the cost range and schedule, which are needed for Critical Decision 1 (Approval of Alternative Selection and Cost Range).

BTeV is an experiment proposed to be run at the Tevatron after the completion of Run II. It is a technically aggressive experiment that hopes to utilize recently developed technology to enhance its physics capability. It will have a competitor in the LHC-B experiment, so it is important that BTeV can meet its planned schedule. It will be built while Run II is operating, so the resources needed by BTeV must be compatible with those available while operating Run II. All of these points reinforce the need for a high quality technical, cost, schedule, and management review.

In performance of a general assessment of progress, current status, and the identification of potential issues, the committee should address the following specific items:

- 1. Technical Scope: Does the proposed design and associated implementation approach satisfy the performance requirements?
- 2. Cost Estimates: Is the cost estimate consistent with the plan to deliver the technical scope with the stated performance? Is the contingency adequate for the risk?
- 3. Schedule: Is the proposed schedule reasonable and appropriate in view of the technical tasks and proposed funding profiles? Has the critical path been identified?
- 4. Resources: Is the proposed resource allocation adequate to meet the project's goals without impacting the overall laboratory program?
- 5. Management: Is the proposed management structure adequate to deliver the proposed technical scope within specifications, budget, and schedule?
- 6. Risks and Mitigations Strategies: Have the risks for the cost, schedule and scope been identified? Are there adequate mitigations strategies for these risks?

Michael Procario is the program manager for the BTeV Project in this office and will serve as the Office of High Energy Physics (OHEP) contact person for the review.

We appreciate your assistance in this matter. As you know, these reviews play an important role in our program. I look forward to receiving your Committee's report.

You are asked to submit a formal report to OHEP within 60 days of the review.

Robin Staffin Associate Director Office of High Energy Physics Subject: Request to conduct a CD-1 Review for B Physics on April 27-29, 2004 at Ferm.

 $Filed: \ MProcario: vb: 03/09/04: Q/Laboratories/FNAL/BTeV/CD-1/Lehman\ Review/BTeV/CD-1/Lehman\ Review/BTeV/CD-1/Lehma$ 

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